

Professional-Technical Education # 360

*Technical Committee Report
and Curriculum Guide*

for

Nutrition and Foods



*This report was prepared by the
Idaho Division of Professional-Technical Education
Family and Consumer Sciences Education
Boise, Idaho*

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Idaho State Board for Professional -Technical Education

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INTRODUCTION

The curriculum development process undertaken by the Idaho Division of Professional-Technical Education involves active participation of industry representatives and educators. For development of the Nutrition and Foods curriculum the majority of committee members were educators who have taught Nutrition and Foods and were recommended by their colleagues. Industry personnel were included as part of the committee where their expertise and opinions were required. The new Nutrition and Foods curriculum framework was developed by state staff and university personnel using the National Standards for Family and Consumer Sciences Education and other state curriculum guides. The curriculum team wrote, reviewed and revised the curriculum framework. This report was prepared upon completion of the committee's assignment. The list of key competencies and performance indicators prepared by committee members reflects the knowledge and skills currently recommended for students in the Nutrition and Foods course. Students who complete this course will be better prepared to meet the challenges of living and working in today's society.

The result of the work of the curriculum committee members is this statewide curriculum guide. These individuals have written overall outcomes, key competencies, and performance indicators. The committee prepared materials in a competency-based format to have an effective and efficient methodology for determining student progress. The statewide guides are designed as the primary determiner of the program content. It is not the intent of the State Division of Professional-Technical Education that all programs are designed exactly the same, but assurance is needed that the program meets the minimum standards for operation. Schools offering Family and Consumer Sciences Education should use advisory committees to reflect local and community needs.

The Curriculum Guide is also used as the primary list for generating student profiles. The profile is used as a cumulative record of each student's progress and serves as proof of instruction for articulation purposes. They have performance scales for each indicator so that student competence can be recorded.

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NUTRITION AND FOOD

COURSE DESCRIPTION:

Nutrition and Food is a beginning one-semester course designed to address nutrition and personal lifestyle. Content emphasis includes food safety and sanitation, food preparation techniques, meal management skills, consumer skills, etiquette, nutrition, health, and career options in nutrition and related fields. This course is a prerequisite for Occupational Food Production/Service.

IMPORTANT INFORMATION

Delivery of the Nutrition and Food Curriculum

It is recommended that this course emphasize full-class participation, teamwork and individual projects and/or study. The teacher is the facilitator and the manager of the classroom environment. The focus is on problem-based instruction that is designed to enable and inspire students to plan and take actions for the well-being of self and others in the home, workplace, community and world. Students also practice action through participation in FCCLA, Family, Career, and Community Leaders of America, a co-curricular student organization that has the family as its central focus.

Teacher Qualifications

The teacher of this course must be vocationally certified in Family and Consumer Sciences Education. It is highly recommended that teachers have industry experience or a recent internship experience to gain knowledge about career opportunities in family and community services occupations.

Length and Level of this Course

This course is a one or two semesters/trimester experience preferably at the 11th or 12th grade level.

Recommended Resources

Adult Living Activity/Resource Guide, 1999

Materials from the current curriculum material list for Family and Consumer Sciences

I. MAJOR CONCEPTS/CONTENT/RATIONALE:

Since food plays a major role in our lives and has a social and cultural meaning, it is important to understand the impact of food on individuals and families. The understanding of nutrition and foods will enable students to make critical decisions regarding food choices that contributes to the health and well being of individuals, families, and communities. In a society where family roles are changing, technology is rapidly progressing, and career opportunities in food and nutrition are growing and varied.

II. COURSE DESCRIPTION:

Nutrition and Food is a one-semester course designed to address nutrition and personal lifestyle. Content emphasis includes food safety and sanitation, food preparation techniques, meal management skills, consumer skills, etiquette skills, nutrition, health, and career options in nutrition and related fields. This course is a prerequisite for Occupational Food Production/Service.

III. INTENDED OUTCOMES:

After successfully completing this program, the student will be able to:

01. Evaluate factors affecting individual and family food choices.
02. Analyze nutrition, health and wellness practices across the life span.
03. Employ food laboratory management techniques.
04. Demonstrate the management of food and resources for individuals and families.
05. Demonstrate the preparation of nutritious foods for individuals and families.
06. Analyze career options within nutrition, foods, and related fields.

Nutrition and Food Scope and Sequence

- (10%) I. Factors Affecting Food and Nutrition Choices**
- A. Physical, Social, Psychological, Cultural, & Monetary Factors
 - B. Cultural, Regional Effects
 - C. Family Life Cycle
- (25%) II. Nutrition, Health, and Wellness Practices**
- A. Benefits of Good Nutrition
 - B. Nutrient Needs and Sources
 - C. Relationship Between Nutrition and Health
 - D. Health Concerns and Considerations
 - E. Nutrition and the Life Cycle
 - F. Planning Daily Food Intake
- (15%) III. Food Laboratory Management**
- A. Laboratory Equipment and Workspace
 - B. Laboratory Safety
- (20%) IV. Management of Food**
- A. Food Purchasing
 - B. Food Selection and Storage
 - C. Food Safety and Sanitation
 - D. Meal Management
 - E. Meal Planning
 - F. Positive Mealtime Skills
 - G. Science and Technology
- (20%) V. Preparation of Nutritious Foods**
- A. Basic Preparation Skills
 - B. Fruits and Vegetables
 - C. Milk Group Foods
 - D. Meat, Poultry, Fish, Eggs, and Legumes
 - E. Bread, Rice, Pasta, and Grains
 - F. Food Combinations
- (10%) VI. Career Options in Foods and Nutrition**

- A. Explore Occupations within Food Service and Related Fields
- B. Job Qualifications

01. EVALUATE FACTORS AFFECTING INDIVIDUAL AND FAMILY FOOD CHOICES

01.01. KEY COMPETENCY: Analyze factors affecting food and nutrition choices.

PERFORMANCE INDICATORS:

1. Examine physical factors
2. Examine social factors
3. Examine psychological factors
4. Examine monetary factors
5. Examine the influence of personal beliefs on food choices
6. Examine the role convenience and availability have on food choices

01.02 KEY COMPETENCY: Explore the effects of culture and region on food customs.

PERFORMANCE INDICATORS:

1. Explore food customs among cultures around the world
2. Explore food customs among various regions of the United States

01.03. KEY COMPETENCY: Evaluate the effect of the family life cycle on food choices.

PERFORMANCE INDICATORS:

1. Describe changing nutritional needs and food choices among individuals in different stages in the life cycle
2. Examine effects of family structure, schedules, and activities on food choices
3. Explore ways to encourage healthful eating habits for various stages of the life cycle
4. Examine the relationship of individual and family health on food choices

02. ANALYZE NUTRITION, HEALTH, AND WELLNESS PRACTICES ACROSS THE LIFE SPAN

02.01 KEY COMPETENCY: Examine the benefits of good nutrition on personal health and well being.

PERFORMANCE INDICATORS:

1. Define the terms hunger, appetite, nutrition, and diet (food intake)
2. Assess optimal physical and emotional benefits of good nutrition
3. Describe the relationship between good nutrition and cognitive performance
4. Examine the effect of sound nutrition practices on quality of life and longevity
5. Explain the relationship between nutrition and personal appearance
6. Identify the effects of nutrition on optimal growth and development

02.02 KEY COMPETENCY: Evaluate nutrient needs and sources for individuals and families.

PERFORMANCE INDICATORS:

1. Identify key nutrients and their function in the body
2. Assess the importance of each key nutrient
3. Identify good food sources of each key nutrient
4. Compare the nutrient densities of various foods
5. Evaluate the appropriate use of dietary supplements
6. Explain the purpose of Dietary Reference Intake's (DRI's)
7. Examine current and emerging issues and controversies related to nutrition

02.03 KEY COMPETENCY: Analyze the relationship between nutrition, physical activity, and a healthy weight for life.

PERFORMANCE INDICATORS:

1. Examine the role of nutrition in a healthy weight for life
2. Describe techniques for maintaining a healthy weight for life
3. Relate the digestive process/endocrine connection to satiety
4. Examine personal eating habits in relation to nutrition and health
5. Explore the concept of total lifestyle, including physical activity in health and wellness
6. Identify components of fitness and wellness
7. Examine the long-range effects of poor eating habits on one's system
8. Develop and implement a plan to improve personal eating habits and physical activity

02.04. KEY COMPETENCY: Analyze health concerns and considerations in relation to nutrition practices.

PERFORMANCE INDICATORS:

1. Examine the characteristics of various eating disorders and their effects on personal health and well being
2. Analyze various fad diets and weight control plans
3. Describe the role of nutrition in health promotion, disease prevention, and disease
4. Examine food needs for physically active individuals
5. Examine food choices for individuals with special needs
6. Explore perceived and real food allergies and sensitivities
7. Explore the different types and sources of vegetarian diets
8. Evaluate types of vegetarian diets for nutritional soundness

02.05 KEY COMPETENCY: Examine changing nutritional needs throughout the life cycle.

PERFORMANCE INDICATORS:

1. Describe the nutritional needs of pregnant/lactating women
2. Evaluate nutritional needs during infancy, childhood, and adolescence
3. Explain the changing nutritional needs through the stages of adulthood

02.06 KEY COMPETENCY: Design a personal, balanced daily food intake plan using recommended food guides.

PERFORMANCE INDICATORS:

1. Explain the Food Guide Pyramid, Dietary Guidelines for Americans, and Dietary Reference Indexes
2. Examine guidelines for using the Food Guide Pyramid, Dietary Guidelines for Americans, and Dietary Reference Intakes
3. Compare personal eating habits to the Food Guide Pyramid, Dietary Guidelines for Americans, and Dietary Reference Intakes
4. Demonstrate ways to incorporate food guides into daily food planning
5. Evaluate information sources related to nutrition science
6. Develop a variety of personal food intake plan

03. EMPLOY FOOD LABORATORY MANAGEMENT TECHNIQUES

03.01 KEY COMPETENCY: Utilize laboratory equipment and workspace.

PERFORMANCE INDICATORS:

1. Recognize the names and functions of food preparation tools and utensils
2. Evaluate the use and quality of large and small appliances and equipment
3. Explain the selection, use, and care of equipment
4. Identify work centers and their role in management
5. Practice safe and effective use and care of equipment and utensils
6. Explore future trends in food preparation technology and equipment

03.02 KEY COMPETENCY: Practice laboratory safety techniques.

PERFORMANCE INDICATORS:

1. Follow lab safety guidelines and rules
2. Formulate strategies to prevent accidents
3. Practice safe food handling and storage practices
4. Maintain safe working conditions
5. Demonstrate basic first aid procedures for minor accidents
6. Demonstrate knowledge of fire safety
7. Practice safe use of equipment
8. * Acquire a food handler's license/Food Safety Certificate

*Optional Enhancement

04. DEMONSTRATE THE MANAGEMENT OF FOOD FOR INDIVIDUALS AND FAMILIES

04.01 KEY COMPETENCY: Examine food-purchasing techniques.

PERFORMANCE INDICATORS:

1. Evaluate food advertising
2. Compare and contrast various types of grocery and prepared food outlets
3. Describe techniques for getting the best value for the food dollar
4. Explain nutrition information and product dates found on food labels
5. Examine influences on food prices
6. Examine the use of technology in grocery shopping
7. Demonstrate the use of careful consumer decision making

04.02 KEY COMPETENCY: Demonstrate basic food selection and storage techniques.

PERFORMANCE INDICATORS:

1. Develop skills to select and handle food to preserve nutrition, quality, and safety
3. Compare and contrast reasons for selecting fresh vs. convenience foods.
4. Identify signs and causes of food spoilage
5. Select appropriate storage techniques for a variety of foods
6. Evaluate prepared and partially prepared foods for quality, taste, cost, time, and convenience

04.03 KEY COMPETENCY: Evaluate food safety from production through consumption.

PERFORMANCE INDICATORS:

1. Evaluate conditions and practices that promote safe food handling
2. Examine safe cooking temperatures and methods for a variety of foods
3. Evaluate methods to prevent cross contamination and food borne illness
4. Practice safe and sanitary lab procedures
5. Assess safety and sanitation practices in the food industry
6. Describe the governments role regarding safety of the food supply

04.04 KEY COMPETENCY: Demonstrate meal management skills.

PERFORMANCE INDICATORS:

1. Practice budgeting to help control food costs
2. Explain the importance of weekly meal planning
3. Compare the time and financial costs of eating out and preparing meals at home
4. Identify programs that offer assistance for individuals and families in need

04.05 KEY COMPETENCY: Demonstrate meal planning issues and techniques.

PERFORMANCE INDICATORS:

1. Examine different eating patterns among individuals and families
2. Identify resources associated with menu planning
3. Examine the influence of technology on meal planning
4. Examine characteristics that make menus appealing
5. Analyze meal plans for adequate nutrition for individuals and families
6. Explore the role convenience foods play in meal planning
7. Describe meal modifications for individuals and families with special dietary needs and medical conditions
8. Practice planning meals for an individual or group
9. Plan a meal using several different budget levels

04.06 KEY COMPETENCY: Demonstrate skills to a foster positive mealtime environment.

PERFORMANCE INDICATORS:

1. Explore the benefits of shared mealtime on family well being
2. Explain the importance of simple table etiquette
3. Demonstrate a variety of table settings for different occasions
4. Explore the benefits of positive table time communication
5. Examine the benefit of including family members in meal planning and preparation
6. Practice basic etiquette guidelines while eating

04.07 KEY COMPETENCY: Evaluate the impact of science and technology on food composition, safety, and nutrition.

PERFORMANCE INDICATORS:

1. Explore how technological advances impact the nutrient content, quality, availability, and safety of food
2. Assess the impact of technology on food selection, preparation, and home storage of food.
3. Discuss NASA Space Program contributions to foods and nutrition
4. Explore the future of food and nutrition

05. DEMONSTRATE THE PREPARATION OF NUTRITIOUS FOODS FOR INDIVIDUALS AND FAMILIES

05.01 KEY COMPETENCY: Demonstrate basic food preparation skills.

PERFORMANCE INDICATORS:

1. Define food preparation terms
2. Demonstrate the ability to follow a recipe
3. Demonstrate basic kitchen math skills
4. Practice measuring liquid, dry, and solid ingredients
5. Demonstrate methods for changing the yield of a recipe
6. Practice food preparation techniques

05.02 KEY COMPETENCY: Explore and prepare nutritious meals using fruits and vegetables.

PERFORMANCE INDICATORS:

1. Identify a variety of fruits and vegetables
2. Explain the importance of fruits and vegetables in a balanced diet
3. Identify the nutritional content of various fruits and vegetables
4. Describe guidelines for selecting fruit and vegetables
5. Compare organic to non-organically grown foods
6. Practice preparation techniques for serving raw fruits and vegetables
7. Apply various methods of cooking fruits and vegetables
8. Evaluate the effects of cooking techniques on nutrient retention, flavor, texture, taste, and appearance
9. Prepare various fruit and vegetable dishes
10. Demonstrate storage methods for flavor, texture, nutritional retention, and safety
11. Evaluate fruit and vegetable food products

05.03 KEY COMPETENCY: Explore and prepare nutritious foods using the milk food group.

PERFORMANCE INDICATORS:

1. Identify different types of milk group foods
2. Explain the importance of the milk group foods in a well-balanced diet
3. Identify the nutritional content of various milk group foods
4. Describe guidelines for selecting milk group foods
5. Explore the functions of milk group foods in cooking
6. Prepare a variety of recipes using milk group foods
7. Prepare a variety of recipes using principles of protein cookery
8. Evaluate the effects of cooking techniques on flavor, texture, taste, aroma, and appearance
9. Demonstrate storage methods for flavor, texture, nutritional retention and safety
10. Evaluate milk group food products

05.04 KEY COMPETENCY: Explore and prepare nutritious foods using meat, poultry, fish, eggs and legumes.

PERFORMANCE INDICATORS:

1. Identify different types of meat, poultry, fish, eggs and legumes
2. Explain the importance of meat, poultry, fish, eggs and legumes in a balanced diet
3. Identify nutrients in meat, poultry, fish, eggs and legumes
4. Explain guidelines for selecting meat, poultry, fish, eggs, and legumes
5. Examine various cuts of meat, poultry, and fish
6. Compare the fat content of various types and/or cuts of meat
7. Explain the challenge of obtaining all amino acids in a vegetarian diet
8. Evaluate the effects of various cooking methods on nutrient retention, flavor, texture, tenderness, aroma, taste and appearance
9. Prepare egg recipes incorporating principles of protein cookery
10. Prepare a variety of recipes using meat, poultry, fish, egg and legumes
11. Demonstrate proper storage methods for flavor, texture, nutritional retention, and safety
12. Evaluate meat, poultry, fish, egg, and legume food products

05.05 KEY COMPETENCY: Explore and prepare nutritious foods using breads, cereal, rice and pasta products.

PERFORMANCE INDICATORS:

1. Identify different varieties of grains, rice, pasta and breads
2. Explain the importance of breads, cereals, rice and pasta in a balanced diet
3. Identify nutrients in breads, cereal, rice and pasta products
4. Describe guidelines for selecting breads, cereal, rice and pasta products
5. Describe the effect heat and liquids has on starches
6. Practice methods of preparing breakfast cereals, rice, and pasta
7. Prepare and evaluate various breads and other baked products
8. Demonstrate proper storage methods for flavor, texture, nutritional retention, and safety
9. Evaluate bread, cereal, rice and pasta food products

05.06 KEY COMPETENCY: Prepare and evaluate a variety of nutritious food combinations.

PERFORMANCE INDICATORS:

1. Prepare sandwiches and snacks
2. Prepare salads and dressings
3. Prepare soups and sauces
4. Prepare casseroles
5. Prepare nutritious beverages
6. Prepare a variety of desserts

06.. ANALYZE CAREER OPTIONS WITHIN NUTRITION, FOODS AND RELATED FIELDS

06.01 KEY COMPETENCY: Explore occupations within food related industries.

PERFORMANCE INDICATORS:

1. Examine career pathways for food and nutrition careers
2. Identify occupational opportunities within nutrition and food related fields
3. Explore opportunities for employment and entrepreneurial endeavors
4. Examine employment trends in nutrition and food related fields
5. Explore the job outlook
6. Determine the availability of entry-level jobs

06.02 KEY COMPETENCY: Evaluate job qualifications.

PERFORMANCE INDICATORS:

1. Compare the educational requirements of various foods and nutrition and related occupations
2. Determine job qualifications needed by workers in the nutrition and foods industry
3. Examine personal characteristics necessary in working in the food and nutrition industry
4. Develop leadership skills necessary for the workplace
5. Develop an educational plan for a food related occupation

****Optional Enhancement:**

KEY COMPETENCY: Develop a business plan for starting a food or nutrition related business.

PERFORMANCE INDICATORS:

1. Identify a variety of food and nutrition related businesses
2. Determine what equipment and resources are needed to start a business
3. Identify sources of capital to fund a business
4. Develop a marketing and/or advertising strategy
5. Establish a customer price list for products and/or services
6. Review local zoning and licensing ordinances for compliance

Directions: Evaluate the student using the rating scale below and check the appropriate number to indicate the degree of competency achieved. The numerical ratings of 3, 2, 1, and 0 are not intended to represent the traditional school grading system of A, B, C, D, and F. The descriptions associated with each of the numbers focus on level of student performance for each of the competencies listed below.

Rating Scale:

- 0 - No Exposure** - no information nor practice provided, complete training required.
- 1 - Exposure Only** - general information provided with no practical application time, additional knowledge/skills required.
- 2 - Moderately Competent** - has performed independently during the program, limited additional practical application and knowledge may be required.
- 3 - Competent** - can apply content knowledge and skills independently with no additional practice.

1. Number of Competencies Evaluated _____

2. Number of Competencies Rated 2 or 3 _____

3. Percent of Competencies Attained (2/1) _____

Letter Grade

Instructor Signature

Date

01.0 Evaluate Factors Affecting Individual and Family Food Choices

The student will be able to:

0 1 2 3
GGGG 01.01 Analyze factors affecting food and nutrition choices
GGGG 01.02 Explore the effects of culture and region on food customs
GGGG 01.03 Evaluate the effect of the family life cycle on food choices

02.0 Analyze Nutrition, Health, and Wellness Practices Across the Life Span

The student will be able to:

0 1 2 3
GGGG 02.01 Examine the benefits of good nutrition on personal health and well being
GGGG 02.02 Evaluate nutrient needs and sources for individuals and families
GGGG 02.03 Analyze the relationship between nutrition, physical activity, and a healthy weight for life
GGGG 02.04 Analyze health concerns and considerations in relation to nutrition practices
GGGG 02.05 Examine changing nutritional needs throughout the life cycle
GGGG 02.06 Design a personal, balanced daily food intake plan using recommended food guides

03.0 Employ Food Laboratory Management Techniques

The student will be able to:

0 1 2 3
GGGG 03.01 Utilize laboratory equipment and workspace
GGGG 03.02 Practice laboratory safety techniques

04.0 Demonstrate the Management of Food for Individuals and Families

The student will be able to:

0 1 2 3
GGGG 04.01 Examine food-purchasing techniques
GGGG 04.02 Demonstrate basic food selection and storage techniques
GGGG 04.03 Evaluate food safety from production through consumption
GGGG 04.04 Demonstrate meal management skills
GGGG 04.05 Demonstrate meal planning issues and techniques
GGGG 04.06 Demonstrate skills to foster a positive mealtime environment
GGGG 04.07 Evaluate the impact of science and technology on food composition, safety, and nutrition

05.0 Demonstrate the Preparation of Nutritious Foods for Individuals and Families

The student will be able to:

0 1 2 3
GGGG 05.01 Demonstrate basic food preparation skills
GGGG 05.02 Explore and prepare nutritious meals using fruits and vegetables
GGGG 05.03 Explore and prepare nutritious foods using the milk food group
GGGG 05.04 Explore and prepare nutritious foods using meat, poultry, fish, eggs, and legumes
GGGG 05.05 Explore and prepare nutritious foods using breads, cereal, rice, and pasta products
GGGG 05.06 Prepare and evaluate a variety of nutritious food combinations

06.0 Analyze Career Options Within Nutrition, Foods, and Related Fields

The student will be able to:

0 1 2 3
GGGG 06.01 Explore occupations within food related industries
GGGG 06.02 Evaluate job qualifications